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ADULT HEALTH PROTECTION ACT OF 1966

Mr. WILLIAMS of New Jersey. Mr. President, the 89th Congress convened a little over a year ago with a clear call from the President and people of this Nation. Our job was to act effectively on urgent legislation essential to a society in search of greatness. And high on our agenda for action were the medicare bill and proposals to increase health resources of the Nation.

In short order, we passed:

Medicare, which is expected to cost at least \$3.5 billion by 1967, with a supplemental appropriation of \$9 million for the development of needed out-of-hospital services and facilities.

The killer diseases program, with over \$300 million to be spent for research and treatment of heart diseases, cancer, and stroke.

Amendments to the Health Professions Educational Assistance Act of 1963 to extend the authorized construction program and student loans for 3 more years, and to create new scholarship grants and improvement grants to medical and allied professional schools.

Amendments to the Health Research Facilities Act of 1956, authorizing construction grants of \$280 million.

Amendments to the Community Mental Health Centers Construction Act of 1963 which authorize grants to improve facilities and services for the mentally retarded and handicapped children.

Amendments to extend community health services to control the communicable diseases and to develop better and more widely distributed health care for the chronically ill and aged.

But the work done by the health Congress of 1965 was a new breakthrough rather than a final triumph. Our major advantage now is that we are better able to judge what must yet be done. Just as Newton once said he could see farther than his predecessors because he could stand on their shoulders, Congress has built an observation platform high enough to give us new perspective on the health needs of a nation.

We can now recognize more clearly, for example, that our medical resources are already strained at this critical moment of increasing demand. Dr. Howard A. Rusk, director of the Department of Physical Medicine and Rehabilitation at New York University, summed up the medical manpower situation in his column of January 2:

Increased training of health personnel is essential.

To maintain our present ratio of 140 physicians for every 100,000 persons, 330,000 physicians will be needed by 1975.

This will necessitate the annual graduation of 11,000 students, 3,600 more than the 1959 total.

However, estimates indicate that by 1975 our annual graduation rate will be only 9,185.

The Surgeon General's Consultant Group on Nursing estimated in 1963 a projected need for 850,000 practicing professional nurses by 1970. This compares with a national supply of 550,000 in 1962, of whom 117,000 were working only part time.

Also reporting on the nurse shortage, the New York Times said in an editorial on November 9, 1965:

It is hoped that the Nurse Training Act of 1964, providing \$283 million in aid to schools of nursing over the next 5 years, will bring the total number of registered nurses in practice by 1970 to 680,000. But even if this goal is reached, it will provide for only 38 percent of hospital patient care.

As doctors and others become increasingly alarmed about manpower deficiencies, we also hear questions about the heavy demands made upon the precious time of the physician. At the recent White House Conference on Health, for example, Dr. Robert M. Zollinger, professor and chairman of the Department of Surgery at Ohio State University, said:

No physician can today or in the foreseeable future have the time to take total care of his patients, and he must depend upon auxiliary help. I foresee that, by special training now proposed for the physician in family practice he will serve more and more as triage officer by directing his problem patients to special centers for definitive treatment.

The Surgeon General of the United States, Dr. William H. Stewart, addressed the same Conference and said:

Year by year, our top professional personnel are being trained to perform still more complex tasks. How long can each profession afford to hang onto its simpler functions—the routine filling of a tooth, for example, or the several easily automated steps in a medical examination? How can we train the physician or dentist to make full use of the skills available in other people, freeing himself to perform only those duties for which he is uniquely qualified?

Demands on physicians and other professionally trained persons are further intensified by what might be called our system of crisis medicine. It is a system that demands superb skills, advanced knowledge and training, and excellent

facilities for the care of the sick, but it is a system designed for maximum effectiveness at a time of emergency: illness or accident. For many of the very poor—the slum dweller, the migrant worker, the elderly pensioner—our advanced medical system might as well have been on another planet. In a nation now committed to delivery of best possible health care to all citizens, obviously much more must yet be done.

If we are to improve dramatically the health and the health care of our Nation, there is one simple fundamental step we can take: a concentrated effort at the early detection in order to help prevent the onset of serious illness and the reduction of its severity.

Obviously, it is impossible to prevent all chronic illnesses—and it will become increasingly difficult to deal with them, using present methods, as larger numbers of Americans add more years to their lifespans.

But such illnesses could be held to a minimum, and the extent of disability or limitation of activity could be controlled or delayed if—

This Nation does all possible to keep people out of hospitals, not only for humanitarian reasons but also to keep the costs of medicare to a minimum.

This Nation anticipates that shortages in medical manpower, together with increasing demands for professional treatment as the aging population of this Nation grows each year, will cause an intensifying need to make the best possible use of the experience, human understanding, and special training of those professionally trained persons who fight illness and death every day.

For these reasons I am introducing today a bill to establish a national program for health maintenance.

THE ADULT HEALTH PROTECTION ACT OF 1966

Mr. President, it has been said that war is the tragic consequence of failure by its preventive diplomacy. If I may draw a parallel, the costly and often futile treatment of long-term illness and disability represents the failure to prevent, or at least control, chronic disease and to maintain health.

Preventive medicine is not a new idea. One aspect of preventive medicine familiar to all is environmental—purifying our water supplies, reducing air pollution, exterminating mosquitoes. Almost every child is painfully familiar with the preventive medicine of the smallpox vaccination, the diphtheria shot, and the measles shot. The dramatic results of

this sort of preventive medicine can be seen in the increased life expectancy of today's American, and the virtual elimination of some diseases within our borders. But the heavy emphasis on this aspect of preventive medicine has had some other obvious repercussions. As some diseases have been conquered, others have taken their place. The drastic rise in the number of deaths caused by heart disease and by cancer can in part be explained by the simple fact that more people live longer, escaping the killer diseases of childhood. In concentrating on environmental health, immunization, and other primary preventive measures, we have done part of the job; we have created a healthful environment for the individual but we have neglected an equally important task: the maintenance and preservation of the health of the individual. This is an increasingly essential complement to the program of environmental health. As far as we know now, heart disease and cancer cannot be conquered by environmental health measures alone. But they can be forestalled or effectively treated by early detection in the individual. We have the techniques, the knowledge, and the equipment to detect the early signs of these and other crippling chronic diseases such as glaucoma, diabetes, and hypertension. The kind of preventive medicine I am discussing is already being practiced on a limited scale in many parts of the Nation. It is not visionary but eminently practical and vitally necessary.

Therefore, in my judgment it is time that we had a national program for the early detection of tendencies toward serious illness. If this Nation established such a program now large enough and effective enough, we could then have the facts and the new techniques necessary to prevent and reduce chronic illness in middle and late years.

Accordingly, I have drafted a bill to amend the Public Health Service Act by adding a new title authorizing a program to protect adult health through the establishment of locally operated health protection centers for the detection of disease.

Any person past the age of 50 would be eligible for such screening if he wished to have it.

Centers would use automated or semi-automated screening techniques which have already proven their worth in everyday use.

Eventually, millions of Americans could thus be encouraged to think in positive terms about the prevention of illness at a time in their lives when prevention is possible.

The beginnings of such a program are contained in the provisions of this bill.

SUMMARY OF PROVISIONS

This bill would authorize the Surgeon General to make grants to medical schools, community hospitals, health departments, and other public or non-profit agencies to establish and operate health protection centers.

REGIONAL HEALTH PROTECTION CENTERS

The regional health protection centers would provide a series of basic tests to detect abnormalities in the cardiovascular, respiratory, gastrointestinal, genitourinary and musculoskeletal systems, as well as defects in metabolism and organs of special sense. Specific diseases or conditions to be tested for might in-

clude: First, hypertension, heart muscle enlargement, and disease; second, mouth, lung, breast, cervical, and other cancer; third, diabetes; fourth, kidney disease; fifth, glaucoma; sixth, tuberculosis; seventh, rheumatoid arthritis; eighth, gastrointestinal bleeding; ninth, anemia; tenth, obesity; eleventh, respiratory insufficiency; twelfth, vision impairment; thirteenth, hearing impairment; fourteenth, hypercholesterolemia; and fifteenth, gout.

The tests would be administered by technicians, nurses, and medical specialists using automated or semiautomated equipment which has already been proven to give swift, accurate, and reliable results. The results of these tests, along with data provided by the person undergoing the health appraisal, would be fed into a computer. It is estimated that the battery of tests could be administered within 2½ hours.

The results of the tests, summarized by the computer, would be referred to the private physician of the person tested. In cases where the person either did not have a private physician or was medically indigent, the test would be referred to a physician in accordance with local practice.

The regional health protection centers are intended to provide an efficient means for the detection of abnormalities or indications of disease. They would not replace full examinations. Their purpose is to place in the hands of the examining physician a summary of basic data and to place promptly under a physician's care a person with indications of possible disease.

The centers would be under the supervision of physicians, but they would be principally staffed by technical personnel. Health counselors would be on the staffs of the centers to explain the purpose of the tests, to insure proper referral and to follow up those cases where prompt medical treatment was indicated by the tests.

Health appraisals and disease detection tests would be available to any person age 50 or above on a voluntary basis.

The regional health protection centers would conduct training programs in the operation of technical disease detection procedures and would research and develop new disease detection tests and equipment. Additional grants to the regional centers would be authorized for operational research and for the establishment of internships to give on-the-job training to physicians, nurses, social workers, and technical personnel. The centers would also conduct community education programs on preventive health care.

The availability of these testing services would be intended to encourage men and women approaching retirement to take regular health examinations and to facilitate the giving of full examinations by practicing physicians.

COMMUNITY HEALTH PROTECTION CENTERS

The Surgeon General would be authorized to make grants to medical schools, community hospitals, and other community health service agencies for the establishment of community health protection centers. They would be linked by data transmission lines to the regional centers and could use the more sophisticated electronic equipment and other facilities of the regional centers for the evaluation of some tests.

One of the criteria for the awarding of grants to regional centers would be their ability to provide services to the small community centers. Although the community centers would be directly connected to the regional centers, they would not necessarily be operated by the same institutions which ran the regional centers. One purpose of the community centers would be to make the services of the regional centers more widely available to a greater number of people. Special facilities might be developed to meet particular needs. For example, mobile units might be used in rural areas.

OTHER PROVISIONS

A 12-man Advisory Council on Adult Health Protection would be established to advise and assist the Surgeon General in the administration of this program.

The Surgeon General would be authorized to contract with educational institutions or other appropriate organizations for the conduct of educational programs. He would also be authorized to contract with profit and nonprofit organizations for the research and development of equipment, systems, or processes which would improve disease detection procedures.

Let me emphasize—that this point bears emphasis—that the centers would not be treatment centers. They would not be diagnostic centers. They would be laboratories which give data to physicians, who would interpret that data and deal directly with patients when consultation would be needed.

The bill I am introducing requires that in every case the results of the screening test be given to a practicing physician. The health protection centers would not be equipped or intended to provide treatment, although the staff of the centers would be expected to follow up cases and to make sure that a participant was promptly brought under a doctor's care if treatment was indicated by the tests. Even should the screening tests show no indications of possible disease, the data would provide basic information to a physician on his patient which would be extremely helpful for a full physical examination by a doctor or as base line data in future examinations.

Doctors would thus be given more time to perform the executive, expert functions that only they can perform. They would be given more time and more facts to help more people.

As the population continues to increase—especially the elderly population which is most susceptible to chronic disease and disability—physicians and others in the health professions will need all the time they can get.

COST OF CHRONIC ILLNESS TODAY

Before proceeding with our discussion, we should be aware of the important difference between the terms "disease," and "illness." Disease is a pathological process which may not necessarily produce symptoms. Illness—or sickness—is a condition that comes from disease. Present knowledge does not permit us to prevent the onset of the majority of chronic diseases. However, available knowledge can be utilized as a potent weapon to prevent, mitigate, or delay the onset of the illness which is a byproduct of these diseases. An example is atherosclerosis, or hardening of the arteries. An individual may have advanced atherosclerosis with no obvious symptoms of the disease. He thus has a chronic dis-

ease without illness. Diagnosis in the crucial preclinical stage can have a far-reaching effect upon the future health status of that individual.

Our failure to provide a nationwide program of health appraisal leading to early diagnosis may be directly charged with the high cost of chronic illness today.

Here are some appalling facts:

Chronic disorders afflict about 74 million Americans, some of whom have more than 1 ailment.

Among individuals 65 years old or older, more than half are functionally limited to some degree.

Last year, more than 990,000 persons died of heart diseases.

It is estimated that as many as 25 percent of the Nation's adults are currently afflicted with heart disease.

Cancer takes 250,000 lives each year.

The President's Commission on Heart Disease, Cancer, and Stroke has reported that these diseases alone cost the Nation close to \$30 billion each year in lost productivity and lost taxes due to premature disability and death.

Arthritis now claims 13 million sufferers—and costs the U.S. economy over \$1 billion yearly. It cripples more people in low-income families than in other groups and disables more people than any other chronic disease.

More than 20 million people are affected by blindness, deafness, epilepsy, mental retardation and other neurological disorders.

Two million are known diabetics.

Almost 1.5 million over 40 years of age are afflicted by glaucoma.

Presently, we are spending \$4 billion a year for maintenance and medical care of disabled people through public assistance programs, in annual compensation and pension payments to veterans by the Veterans' Administration, and in Federal-State moneys for basic support of vocational rehabilitation services.

And, the Public Health Service is currently authorized to spend some \$53 million for various programs attacking a number of the chronic diseases by means of extended community health programs, for demonstrations in new care service techniques—especially for heart disease and stroke—for cancer cytology, for screening for diabetes, for support for the artificial kidney, for community programs attacking arthritis and rheumatism, and for treatment facilities for chronic respiratory disease, epilepsy, and other neurological disorders.

Just this month, I obtained some figures on the prevalence of chronic conditions among persons 45 years of age and over. This is approximately the age group with which my legislation is concerned.

Prevalence of chronic disease in persons over 45

	Per 1,000 population
Hypertension including hypertensive heart disease.....	292
Arthritis and rheumatism.....	180
Chronic bronchitis.....	100
Hearing impairment.....	90
Coronary heart disease.....	58
Vision impairment.....	51
Diabetes.....	50

Source: Public Health Service.

If these statistics seem to suggest that we have already been tardy in establishing detection and prevention programs, we can draw some comfort from pioneer-

ing work begun under private, State, or local auspices. The most dramatic and significant example is the automated multiphasic screening project operating for the benefit of workers and their families on the west coast to members of the Kaiser Foundation health plan.

This program, in fact, almost serves as a pilot precedent clearly showing the practicality and value of an effective screening program.

THE KAISER FOUNDATION PROGRAM

To those who use the Kaiser program, the word "multiphasic" merely means "comprehensive." Within 2½ hours they receive a battery of tests comparable, and in some respects superior, to traditional testing made without benefit of automation.

I will describe the procedure in some detail because of its direct relationship to my legislative proposal.

In the multiphasic health checkup, one patient registers every 2½ minutes, and is through in 2½ hours.

Upon arrival at the screening center, each participant registers at the reception desk. He receives a series of questions on IBM cards to which he will respond during waiting intervals between tests and, when completed, to be fed into the computer.

The first procedure involves an electrocardiogram and heart sound recordings for the detection of heart abnormalities.

After the test is completed, the participant is asked to drink a measured amount of chilled, carbonated sugar solution. This is in preparation for the drawing of a blood sample 1 hour later for the blood sugar test for diabetes. Before coming to the center, the individual was instructed to fast for a minimum of 4 hours in preparation for this test. A timecard is stamped to record the exact time the sugar solution is taken.

Weight, height, and body build measurements are recorded directly on the IBM card. This information is important for future use, as changes in these base measurements at a later date could indicate the onset or development of a chronic disease.

A chest X-ray is then taken. This procedure is important not only for the detection of tuberculosis, but can yield significant information on other types of pathology in the lung, heart, large blood vessels in the chest cavity, and bony structure of the chest.

For women over 40, there is mammography, an X-ray examination of the breast. This procedure has proved to be a valuable aid in early diagnosis of breast cancer and other breast conditions.

The eyes are next tested. Visual acuity is recorded, and eye pressure tests are conducted for the detection of glaucoma.

A test to measure lung capacity follows. This test is aimed at the detection of emphysema.

Hearing is then tested with an audiometer, and results are recorded on a graph and then transferred to the computer card. The computer is programmed to read out results in terms of hearing loss.

At this point, the 1-hour interval after drinking the sugar solution is reached. Blood is drawn and used for several groups of tests. Blood serum from this sample is placed in the autoanalyzer, and eight complicated tests are conducted simultaneously, with results available in 11 minutes. Among other vital findings, these tests indicate the pos-

sibility of diabetes, high cholesterol levels, chronic liver disease, gout, kidney disease, loss of calcium from the bones, and certain digestive diseases. Whole blood is used to determine the hemoglobin level and the white blood-cell count, thus throwing light on the presence of diseases such as anemia and leukemia.

A urine sample is then taken and tested for evidence of kidney infection and other diseases of the kidneys, as well as diabetes. Results are automatically recorded on the IBM card.

Following this procedure, a photograph is taken of the inside of the eye which has the value of not only visualizing the optic nerve, but also the condition of the small blood vessels which are representative of those throughout the body. This test can yield important information about the presence of a wide variety of systemic diseases, including diabetes, leukemia, advanced hypertension, and even increased pressure within the head.

As a finale to the screening line, the blood pressure and pulse rate are recorded, and the information is correlated by the computer with other tests and diagnoses.

In the case of certain tests, and computer is so programmed that where abnormalities are identified, the person may be immediately called back for related tests or a recheck of the test taken. When all the results are completed and the information is recorded and fed into the computer, a printout is received from the computer which gives a health profile of the individual. The printout is provided to the physician for use in initiating the diagnostic and therapeutic measures indicated.

The efficiency and effectiveness of this automated system may lead one to think that this is a thoroughly depersonalized, assemblyline procedure. Fortunately, this is not so. The technicians and nurses have been carefully selected not only for their specialized abilities but for their personal qualities, as well. They are able not only to perform their tasks skillfully, but to maintain a cheerful attitude.

Though still in its early stages, the program has already yielded important summary findings. Almost 50,000 multiphasic examinations have now been completed.

Do these automated health estimates actually lead to diagnoses?

Among 9,760 participants on whom completed diagnostic examination records were available, the doctors confirmed the health appraisal findings as follows:

Verified diagnoses from findings of multiple screening procedures¹

	Rate per 1,000
Hypertension and hypertensive heart disease.....	88.6
Anemia (women).....	51.4
Emphysema and bronchitis (men).....	34.2
Coronary heart disease.....	28.1
Diabetes.....	28.0
Gout (men).....	9.5

¹ Program conducted by Permanente medical group in Oakland, Calif.

Here is concrete evidence of the priceless value of the preliminary health estimates in the ultimate control of heart disease, arteriosclerosis, diabetes, and many other degenerative diseases of aging.

The electrocardiogram found heart abnormalities in almost 18 percent of the women examined and in about 21 percent of the men.

Women examined showed a consistently higher percentage of impaired visual acuity than males, about 7 percent of persons in the age group 50 to 59. Photographs of the inner eye revealed some abnormalities in almost 1 of every 10 persons, including retinal arteriosclerosis—an important index to other aging and arteriosclerotic processes—in 3 percent of all patients.

These are just a few facts pulled at random out of the multiphasic program's most recent report. The electronic brain used to report out this information can also combine the results of a wide range of tests and pose probabilities—which are infinitely helpful to the individual physician in his task of performing a more detailed examination leading to diagnosis.

In the year between September 1964 and the end of August 1965, a preventive health service research program was instituted by Kaiser directed toward investigating the preventive aspects of chronic illness and disability. The health protection centers established by my bill will do this kind of research into the techniques of health appraisal and preventive medicine.

But one of the strongest arguments for support of health appraisal services is this: the availability of a centralized, complete health estimate facility serves to motivate people to come in for preliminary testing, particularly people who would not go to a doctor unless they were critically ill or experiencing acute pain or other frightening physical symptoms. Neither the stigma of supposed hypochondria, nor the guilt of taking up a doctor's time unnecessarily, are present.

EXPERIENCES WITH OTHER PROGRAMS

Mr. President, I first addressed the Senate on "Preventicare" in September 1965. Soon after, I wrote to physicians, educators in medicine, public health directors, and others asking for their opinions and experiences. The replies were for the most part enthusiastically receptive. I ask unanimous consent that a number of these replies be printed at the conclusion of my remarks. In addition, several letters give information on the effectiveness of screening programs that were limited to a relatively small geographical area or to one or a limited number of diseases.

For example, the Federation of Jewish Philanthropies of New York reminds me that Mount Sinai Hospital in that city has instituted "the practice—which many hospitals have adopted—of doing a complete battery of tests on patients—when—admitted. The belief is growing that the cost of doing this, instead of the individually selected tests related to a patient's clinical needs is no higher and the higher productivity of meaningful results enables the physician to render a better qualitative service to his patient."

Dr. John A. Cowan of the Michigan Department of Health writes that his State has been doing multiple screening examinations since 1954 among apparently healthy young adults employed in small industries.

The results have been very satisfying—

He says—

and have revealed that many people who believe they are perfectly well have condi-

tions which predispose to chronic diseases or have beginning chronic diseases which have not as yet become symptomatic.

While a battery of health tests cannot replace the complete history and physical examination of a knowledgeable personal physician, Dr. Cowan sees in my proposal "the means of detecting asymptomatic disease" and "to promote health to a large group of our population."

Dr. A. L. Chapman, now with the Commonwealth of Pennsylvania Department of Health, writes me about an early demonstration project he developed in a housing project in Indianapolis in 1949.

Among the first 1,000 apparently well adults who were screened, about 1,200 conditions were found. Of these, one-third were serious: nephritis, heart disease, hypertension, diabetes, tuberculosis, syphilis, arthritis, glaucoma. About two-thirds were vision and hearing defects, overweight, and other less serious—but correctible—conditions.

Shortly after that, Dr. Chapman writes, a comparative study was done at the Boston Dispensary. A group of 1,000 apparently well adults received 3 different types of examinations conducted by 3 different teams. The first was a \$10 routine physical examination; the second, an abbreviated physical costing \$5; and, the third, a multiple screening examination conducted largely by technicians and costing about \$1. An evaluation of the effectiveness of these three types of examinations showed that more pathological conditions were found by multiple screening than by either of the—then—more orthodox physical examinations.

I also have a letter from Dr. Murray Grant, Director of Public Health for the District of Columbia, enclosing a recent article—which I shall request to be included in the RECORD—concerning a screening program that has been underway here in the District for the past 2½ years and with which some of us are familiar.

Dr. Grant believes that this "bears considerable similarity" to what I am proposing, and calls our attention especially to the cost figures, the evaluation, and the results of the operation thus far.

Further than this—

He writes—

I have within the past few months initiated an even larger disease detection program at our Southwest Health Center, which is now operating a full time program of this nature for all persons in the District of Columbia over the age of 40.

Dr. Grant also mentions that this program is rather unique and is not yet duplicated in many other communities.

Recently I learned of a multiple screening program conducted in a low-income area in New York City to detect previously undiagnosed illnesses among adults. I was shocked to learn that almost one-third of the persons who participated in the screening program had important health-related conditions that had not come to light prior to the program. The findings indicate that of every 1,000 persons in the area, one could well expect to uncover the following rate of previously undiagnosed illnesses: 107 cases of high blood pressure; 101 cases of diabetes; 19 cases of abnormalities of the heart; 30 cases of glau-

coma; 5 cases of active tuberculosis; and 5 cases of cervical cancer.

I was also impressed with a recent report about a diabetes detection program in San Jose, Calif. Within 28 months, 8,008 persons past the age of 35 were screened. One out of 6 persons—1,436 in all—were referred to private physicians for more definitive diagnosis. Positive diagnosis of diabetes was made for 347 patients, or 27 percent of the 1,280 patients on whom reports were returned by the physicians.

The Health Insurance Plan of Greater New York offers a periodic general physical examination which they believe 20 to 25 percent of their subscribers avail themselves of. HIP also informs me of two recent programs to detect unsuspected glaucoma and breast cancer, the latter an intensive program to determine the value of periodic screening. Early results suggest that the breast cancer program is discovering a significant number of breast cancers that would have otherwise remained undiagnosed, of which a large proportion were still localized when found.

Mr. President, many of my correspondents offered valuable suggestions, some of which I have incorporated in the present bill. A few raised cogent questions which I would like to discuss now. These points will, I am sure, be fully discussed and explored during hearings on the bill.

TIMELINESS OF THE PROPOSAL

Several of my correspondents felt that my proposal is ill timed. They pointed to the large number of health service programs for which we appropriated funds at the last session, on top of already existing health legislation. Some urged that we wait to see how well our local hospitals, health agencies, and university medical centers are able to cope with new community care programs already authorized before asking them to assume still another health service responsibility.

In my view this is somewhat like saying that because we are busy giving polio and flu immunizations we cannot add routine PKU testing as a means of preventing mental retardation in children. It is totally inconsistent with the American spirit to put off doing something vital to national welfare.

For generations we have faithfully and persistently reached one frontier of medicine after another. Prevention of communicable diseases has long since become part and parcel of the objectives of public health. But the prevention of chronic diseases remains a hidden frontier, one we have not yet crossed despite all the time, effort, and money we are spending in research and in experimentation to find ever more successful treatments.

My bill does not propose immediately to establish hundreds of elaborate health appraisal centers all around the country. Within 5 years we would have five regional centers and 20 related community centers in progressive operational stages. These will demonstrate the feasibility of extending similar services to other regions of the country as needed.

I am convinced that this is an eminently reasonable way to begin an attack on chronic disease. To delay now will only postpone the eventual day of reckoning, and the longer we delay the more we will burden our health service facilities with the provision of care for illness

and impairment which might have been avoided or minimized.

I might add that the length of time it took to enact medicare is a good argument for immediate consideration of ways to offer preventive health services. The hour is already late.

SUPPORT FROM THE MEDICAL PROFESSION

No health program—neither my proposal nor any other—is going to succeed fully without acceptance and use by medical practitioners. Time and time again it has been demonstrated that the federally assisted programs which succeed are those which enlist the participation of local physicians and their medical societies during planning stages.

I recognize the same need and the same opportunity in planning for the health protection centers provided for in my bill. I think we can demonstrate to the private physician the time-saving virtues of preliminary health estimates as an aid to the diagnostic work he must do personally. Automated summaries are not diagnoses. Rather, they offer a detailed health estimate on which a more complete, more accurate diagnosis may be based.

MANPOWER SHORTAGES

Almost all of the medical experts who had reservations about this proposal brought up the problem of recruiting and training personnel and the possible drain on already limited health care personnel.

I am well aware of the statistical shortage of doctors, nurses, aids, and medical rehabilitation specialists, and the estimated additional numbers needed, for example, by 1975. There is a sizable school of thought, however, which reaches beyond the numerical shortage and asks whether we are using our available supply effectively. In the field of nursing alone, many studies have shown the waste of professional nursing time in the performance of clerical services or in duties which do not demand their level of professional skill and judgment. I believe it is also common knowledge that many doctors are continuing to perform services which a nurse or technician could safely provide.

So we need to look at how we are using our health manpower resources as well as at how to recruit and train more of them.

Chronic illness care has not attracted practitioners as has acute medicine and surgery. But I believe there will be a strong attraction to the proposed multiphasic testing projects—because automation is new, because results of the tests are produced rapidly, and because dramatic findings of heretofore asymptomatic disease often turn up in the patient's health estimate summary.

My proposal also has a built-in safeguard. The health protection centers will receive grants to train their own professional and technical personnel to adapt basic medical and allied knowledge to the demands of the automated procedures.

Now, as to the risk of draining already short supplies of medical manpower in order to offer more efficient preventive services.

It seems to me that our entire national philosophy is geared to the prevention of undesirable circumstances or conditions. We seek to prevent war, to prevent poverty, unemployment, air and water pollution, crime—even to prevent national and local environmental ugliness.

We have never faltered in our forward movement toward these goals for fear of being unable to recruit skilled professional or technical personnel to do the job. We have created the programs—and people have come forward to staff them.

I submit that the comparatively small numbers of medical and paramedical personnel can be found without jeopardizing existing health services, and they will be people with sufficient vision to want to be part of a team which is not undoing damage but preventing it.

Extensive Federal support is being provided to increase supplies of medical manpower of all kinds and to give them training in the management of chronic illness and disability prevention. Surely, these efforts must not and will not bypass the most fundamental service of all—early appraisal leading to early detection of incipient chronic diseases.

AGE LIMITATIONS

My bill provides that any adult aged 50 or over may be admitted to the multiphasic testing program in the region in which he resides.

Many correspondents suggested that younger individuals should be included. They pointed to the advantages of early identification of abnormalities in men of draft age or, for example, of application of cancer cytology to young women.

However, it would be unrealistic at this time to hope to reach an entire population—as some have suggested—from infancy onward. Actually, pediatrics practice is in large part preventive and offers sound periodic health maintenance and care services to children.

I have no desire to eliminate the young adults to whom we must hand the future. But in order to keep the size and number of the health protection centers within realistic bounds and still to come up with useful results, I thought it advisable to start with the critical decade, the fifties, and to include our older citizens as well, whose limited financial means may keep them out of any program of systematic health examination.

I see this as immediate and essential to back up medicare; to identify the chronic diseases before they become a major care problem, heavily overtaxing community health resources, and to bring people into desirable treatment programs before they reach the age of eligibility for social security health insurance benefits.

RELATIONSHIP WITH NEW HEART, CANCER, AND STROKE COMPLEXES

Some experts have suggested that the health protection centers should be part of the regional heart, stroke, and cancer complexes established by truly historic legislation last year.

As I understand that program, which is just beginning, its principal purpose is to provide for the cooperation of medical schools, clinical research institutions, and hospitals so the latest advances in the treatment of heart disease, cancer, and stroke may be brought to the patient through locally or regionally administered programs of research, training, and continuing education.

This excellent program is directed at the treatment of illness and is a coordinated attack on three major killers. My proposal is aimed at early detection and ultimate prevention, the maintenance of good health rather than the treatment of illness. I think that it is wiser, so that we can have the fullest

discussion and study of the goals and methods of preventive medicine, that the Adult Health Protection Act be considered separately from the heart, stroke, and cancer bill.

It is obvious that the two programs as they develop should be closely coordinated. I think that in actual practice the health protection centers and the heart, stroke, cancer complexes would be in close touch for the exchange of information and new techniques. Certainly both programs share the same basic goal—the improvement of the Nation's health. Ultimately, they would be joint partners in working toward that goal.

COMPUTER RELIABILITY

Several people have challenged the reliability of computerized health data, pointing out that only a physician is qualified to interpret medical findings, establishing significant relationships by use of his professional judgment.

Please let me reemphasize. The computerized health estimate is not a diagnosis. It is a service to the physicians who will make the diagnosis. Furthermore, the health protection centers will be under medical direction. Where determinations are necessary on any of the data, a physician will make them.

I do not think it necessary to defend computer accuracy in the field of health any more than in industry or in space science. We have ample evidence from many reports, however, that the computer readings—of blood chemistry, for example—may be more consistently correct than manual readings which cannot be completely free from a margin of human error.

Dr. Ralph Thiers, of Duke University, reported last September that chemistry tests run at three hospitals, both manually and by automatic analysis, proved that the automated method can detect unexpected abnormalities often enough to significantly help physicians to understand and treat their patients. Dr. Thiers said that the data leave little question that a significant number of additional clinical chemistry abnormalities are being discovered by automation which manual analysis had missed.

This is one one example.

You are probably aware that the Public Health Service is already developing and testing additional electronic screening methods for detection or measurement of disease—the spirogram, to record lung function important in bronchitis-emphysema; the phonocardiogram, to record heart sound; the electroencephalogram, to record electrical impulses given off by the brain.

Some of you may recall a demonstration in New York of an electronics system for analyzing electrocardiograms. Over 700 civil leaders participated, including Governor Rockefeller, and my distinguished colleague, Senator Javrs.

In this demonstration, ECG's were taken, recorded on tape, transmitted by long distance telephone to a tape receiver and computer at George Washington University, here in the District. The computer took 20 seconds to compare the incoming ECG with thousands of similar cases stored in its memory. In 3 minutes plus 4 seconds, the heart's ability to transmit electrically, discharge, recharge, and drive itself had been determined and printed electronically in New York. The computer also sent back the average number of heartbeats per

minute and gave a brief analysis of the data.

Thus, we find not only efficiency in the use of computers but economy as well.

So much for the major objections which have been raised.

Mr. President, recently I read a most provocative article in the New York Times magazine by Prof. Jean Mayer, Harvard professor of nutrition and lecturer on the history of public health. He indicts the health professions as nourishing "an obsession with death which disregards the greater importance of the value and significance of life."

Priorities for health programs, he says, "ought not be established on the basis of mortality statistics which make such conditions as blindness, deafness, tooth decay, mental illness, and arthritis appear insignificant," but on the basis of real human needs.

He points out:

We are not yet used to thinking of subjecting our whole population to competent and continuous preventive care.

Yet this is the only type of medical care which makes sense. More than anything else, Dr. Mayer believes, we need discussion leading to a national plan for prevention, treatment, and rehabilitation.

I respectfully suggest that my "preventicare" proposal will carry us one step closer to this goal.

Our object was well expressed during the White House Conference on Health by Dr. George James, adviser to the President and former New York City commissioner of health. He said that the ideal system would put comprehensive medical service within the reach of everyone. The emphasis would be on preventive medicine and on a continuous effort to identify and treat disease at the earliest possible moment. The purpose? A useful and satisfied human being as well as a healthy body.

Let us replace obsession with death with devotion to life. Modern science has given us a longer lifespan; now modern preventive medicine can give us the good health so that those years need not be years of suffering and decline but years of health and well-being.

Mr. President, I ask unanimous consent that a number of articles and letters relating to this proposal be printed in the RECORD.

The PRESIDING OFFICER. The bill will be received and appropriately referred; and, without objection, the articles and letters will be printed in the RECORD.

The bill (S. 2983) to amend the Public Health Service Act by adding a new title X thereto which will establish a program to protect adult health by providing assistance in the establishment and operation of regional and community health protection centers for the detection of disease, by providing assistance for the training of personnel to operate such centers, and by providing assistance in the conduct of certain research related to such centers and their operation, introduced by Mr. WILLIAMS of New Jersey (for himself and Mr. METCALF), was received, read twice by its title, and referred to the Committee on Labor and Public Welfare.

The articles and letters presented by Mr. WILLIAMS of New Jersey are as follows:

STATE OF GEORGIA,
DEPARTMENT OF PUBLIC HEALTH,
Atlanta, Ga., January 10, 1966.

Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: Your similar letters of November 23, 1965, to the director of our chronic illness and geriatric service, Dr. Albert H. Robinson, and to me, enclosing your proposal for health protection centers have been studied. We are stimulated and encouraged. This letter represents our combined thinking.

I have been working for over a quarter of a century attempting to develop an effective health maintenance plan for all Georgians and your letter has given me a glimpse of what could well mean a major breakthrough into an optimum sickness prevention program.

Prevention seeks to eliminate a cause; treatment seeks to minimize a result. This is the keystone of health protection, for it is always many times more economical to prevent illness than to treat and rehabilitate the ill. It follows, then that we must not let "sick call" for the relatively few crowd out health maintenance for the many.

There is no possible question that the aged sick need the medical care which medicare legislation was hopefully designed to provide for them, but it must not be thought of as a wand that we can wave on the citizen's 65th birthday, magically bringing him health and well-being. We must—we can only—build the foundation for that good health during his younger most productive years. Any other course will inevitably lead to an oppressive national financial burden, a caseload level too heavy to be handled by available, or conceivably available, medical resources, and finally, by injustice to the over-65 citizen himself.

The key to achieving medicare's goal is to insure that each group that reaches its 65th birthday, each succeeding year, comes from a healthy population. I am convinced that your proposed multiphasic screening health protection centers could play a major role in reaching this objective, provided that their facilities were available to what is, in Georgia's experience, the primary population group, the labor force.

Georgia has a total population of slightly more than 4 million people, living in 1.1 million households. These homes are supported by the salaries and wages of Georgia's 1.5 million labor force. The 1.5 million wage earners, generally heads of these households, exert more influence upon the remaining 2.5 million Georgians than any other force. They, therefore, should be the initial primary beneficiaries of any health maintenance program. The labor force not only produces the wealth we need, but also most effectively represents the population we serve.

Emphasis on the prevention of illness among the wage-earning group has a two-fold objective: (1) The productive member of each family is kept in health so that income needed for support is provided internally and the need for outside financial assistance is minimized; and (2) the wage earner, as the most influential member of the family, becomes a natural and effective medium for teaching other members of his family the "take-home health" he has learned on the job.

Within the Georgia Department of Public Health we have developed and are operating an employee's health service which is providing this type of health protection. All of our 30,000 State merit system employees are eligible for periodic screening for early detection of illnesses. Unfortunately, geographic distances prevent the service from being readily available to many of them, underlining, on our own doorstep, the need for such a comprehensive program as your proposed centers would implement.

Our experience to date has confirmed the value of our Georgia State Employee's Health Service. It is well evidenced by the continued valuable service of a growing number

of employees, including a number of key administrators, who probably would have been lost as State servants and family providers except for early detection of serious illnesses. Early case finding usually enables the employee to keep his job and pay for his needed treatment out of earned income. This is infinitely more desirable than the alternative of waiting until advanced disease forces him to give up his job and become a nonproductive burden on his family and on our economy.

Senator WILLIAMS, I have long been convinced that each individual has an inescapable responsibility for his own health that he cannot delegate to any other person or agency. However, it is equally true that each individual has limitations on his own resources for maintaining health, regardless of his status in life. Whenever the demands exceed his personal resources he must turn to community resources for the additional assistance he needs. It must be remembered that individual resources are not limited to money alone, but include education, knowledge, skills, technique, equipment, and even the desire to maintain good health.

Your proposed health protection centers could be of inestimable value as a community resource to help Americans to live up to the inescapable responsibility each has for maintaining his own health.

Medicare will demand the investment of large sums of taxpayer's money, as well as the use of a substantial portion of our national medical resources. It is good business practice—and good, solid humanity—to enable persons approaching the eligibility age for medicare to take reasonable care of their own health prior to becoming eligible. Periodic multiphasic screening for early detection and referral to early treatment for potentially disabling disease is the best way I know to assure the maximum return from the medicare program.

A recommended screening schedule could be: (1) An initial screening at the age of 40, and unless the findings indicate more frequent intervals, rescreening once every 3 years until 50; (2) a screening every 2 years while in the fifties; and (3) a screening once a year beginning at age 60. This schedule, subject to modification with experience, would initiate screenings at the age when the majority of chronic illnesses begin to manifest themselves, accelerating the frequency of screenings with advancing age until, during the years of greatest risk from chronic illness, at least annual screening would be required. Emphasis should initially be placed on screening wage earners within each family, then expanded to other family members as facilities and skills are developed.

Our experience with the multiphasic screening of 1.4 million Georgia citizens during the decade 1945-54 proved to us that screening by itself is not our objective: Any screening program must have a well-organized referral and follow-up system as an integral part of the program if its objective of health care for all those found to need medical attention is to be attained. Our health referral program for medical rejectees from the Armed Forces provides us with conclusive evidence that this is still the case. Discovery of an illness or defect does not of itself assure that the patient will automatically seek the required medical care. In most instances professional guidance such as is provided by our health referral consultants, is necessary to motivate the patient to seek adequate care.

Equally essential for effective case finding is epidemiological followup of contacts and suspects, as demonstrated by the work of our communicable disease investigators in venereal disease detection and referral to treatment and, more recently, the startling effectiveness of a similar technique in tuberculosis. Similar investigations of blood relatives of cases with hereditary metabolic disorders such as diabetes mellitus show promise of comparably effective results.

Senator WILLIAMS, my answer has been ex-

tensive because I believe in what you are trying to do. In fact, I sincerely hope that the State of Georgia may be selected to pioneer a State-wide, automated multiphasic screening program with provision for referral to treatment and follow-up such as I have described. I believe that the know-how we have acquired is unique.

We have within the Georgia Department of Public Health the leadership needed to develop the program. I know that most of us realize that much illness can be prevented, and that prevention is more economical of money and human suffering than is treatment. We must use prevention of disease and illness as the control mechanism to keep medicare manageable. By using multiphasic screening on a scheduled basis according to age, we can keep it manageable. And we can concurrently achieve another major objective—maintaining the health and productive capacity of our labor force.

Please accept my personal thank you for devoting your attention and energies in this field of preventive medical services that so badly needs your assistance. Do not hesitate to call upon me if I can help you in any way.

Sincerely yours,

LESTER M. PETRIE, M.D.,

Director, Branch of Preventable Diseases.

MICHIGAN DEPARTMENT OF HEALTH,

Lansing, Mich., December 9, 1965.

Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: I was very happy to hear about your proposal for providing screening and preventive medical services to the adult population. We have, as you implied in your speech in the CONGRESSIONAL RECORD, accomplished a great deal in terms of legislation for caring for the sick and disabled. Under the amendments to the Social Security Act we have medicare and other maternal and child health services. The sick are given the benefits of modern curative medicine in the two extremes of life—early life from conception until the age of 21 and later for the older person 65 years of age and over. Very little is being done for the group in the great productive years from 21 to 64 to conserve the health of those who must work and pay the taxes to care for the two groups aforementioned. Any program that can assist in the conservation of this group should pay rich dividends both to the individual concerned and to society as a whole. The provisions of medicare and the new legislation for regional health programs for heart disease, cancer, stroke, and related diseases will not solve our problem of preventing disease and disability. Multiple or multiphasic screening activities are now an important component for the early detection of incipient chronic disease and disability. They separate those persons who presumably have abnormalities from those who presumably do not. Such activities save the time of the physician who can spend his time in a more productive manner for those who need his diagnostic and treatment skills and acumen rather than use a disproportionate part of his time for examination of healthy individuals. When such tests can be done by technicians and automated, they can be done expeditiously and at very modest cost.

In Michigan we have been doing multiple screening examinations since 1954. These have been done mostly in apparently healthy young adults employed in small industries. The results have been very satisfying and have revealed that many people who believe they are perfectly well have conditions which predispose to chronic diseases or have beginning chronic diseases which have not as yet become symptomatic. Ideally, screening examinations should be done on all people 30 years of age and over but as a beginning I think they should start not later than 45 to 50 years of age. Until the medical profession as a whole has also seen the value of such screening examinations, the ideal of a complete annual physical inventory for every person is not susceptible to practical attainment for obvious reasons. Physicians

have been trained to diagnose and treat overt disease and disability. They have had little training in preventive medicine and not oriented to conservation of health. Our population as a rule is not motivated to go to a physician unless they are either sick or have pain. For these reasons, as well as the fact that if all persons went for an annual physical examination there would not be enough physicians available to treat the sick, it makes the provision of annual physical examinations for the population purely idealistic. It is necessary to find some practical substitution for such complete yearly examinations. A battery of health tests is not as satisfactory, of course, as a complete history and physical examination by a knowledgeable personal physician. Nevertheless, it can be the means of detecting asymptomatic disease and in promoting health to a large group of our population. In my opinion the time has come for us to prevent sickness rather than spending all of our time in patching up those who are already sick or disabled. The greatest thing that could be done for the older population is to find, treat, and counsel those in the great middle years when they are incubating the diseases which will later cause them to require prolonged care and hospitalization.

I am enclosing some statistics from some of the multiple screening programs that have been done here in Michigan.

Incidentally, if you plan to have hearings on this legislation when it is introduced, the Association of State and Territorial Chronic Disease Program Directors, of which I am the current president, would appreciate an invitation to testify.

Sincerely,

JOHN A. COWAN, M.D.,

Director, Division of Adult Health.

TULANE UNIVERSITY,

SCHOOL OF MEDICINE,

New Orleans, La., December 1, 1965.

Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR: I wish to acknowledge receipt of your letter of November 23 and the attached copy of your Senate speech outlining the need for a health maintenance program. I will appreciate it if you will send me information on the proposed legislation as it develops.

I fully agree with your views and can only reinforce your suggestion that the passage of Public Law 89-97 makes a program of early case finding both necessary and a sensible economy. Meanwhile, I wish to include a copy of Värmland study carried out in Sweden. This was a preliminary study and it seems that in 2 years' time this is intended to cover all of the Swedish population. The meeting in Värmland in September was attended by Dr. James W. Sweeney, director, Tulane biomedical computing system, because the Swedish study is tied in with the Tulane computer. Many of the automated techniques of recording have been worked out by Dr. Sweeney. You will therefore understand our interest. We are presently negotiating with the Public Health Service the establishment of a multiple screening program for elderly persons in New Orleans.

May I add my congratulations for your leadership in developing this excellent program.

Yours sincerely,

J. C. S. PATERSON, M.D., F.R.C.P.,

Associate Dean and Director.

THE UNIVERSITY OF ALABAMA

MEDICAL CENTER,

Birmingham, Ala., December 13, 1965.

Senator HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: You are to be congratulated on your interest in the need for a health maintenance program for Americans. Automated centers such as described by Dr. Collen at Permanente may well provide a partial answer to improving health. I would personally be very pleased if I lived

close enough to take advantage of the comprehensive screening process described by Dr. Collen.

If one considers the economical value of keeping our most productive people on the job, this factor alone could justify consideration of such massive screening starting even earlier than 50 years of age. If a preventable disability is detected at age 40 when there are still 25 years of productive work years to be expected, this may prove to have more impact on our economy than the detection of the person who has only 15 years of expected productivity, or who has retired from active work in the labor market.

I would like to have any information you have in regard to the proposed bill to provide disease detection centers. I hope the bill will include specific provisions for the educational programs which are necessary for such disease detection centers to be truly preventive in nature. The educational components should consider both those necessary for education of professional people and for education of the lay public.

I shall appreciate any information you can send me about the developments in regard to your proposed bill. Please accept my best wishes for your success.

Sincerely,

HELEN L. TINNIN, Ph. D.,

Assistant Professor of Preventive Medicine and Public Health.

FEDERATION OF JEWISH PHILANTHROPIES OF NEW YORK,

New York, N.Y., December 8, 1965.

Senator HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: Thank you very much for the opportunity to comment on your proposal to establish an adult health education program under the terms set forth in the summary which accompanied your letter of November 23, 1965.

When we examine the natural causes of disease we find that one of the stages is the period during which the disease is developing but goes unrecognized. It is not accompanied by recognized symptoms, nor does the involved person feel the need for medical care.

The above stage may very well antedate age 60, and I am in agreement with you that the need for a sound health maintenance program could bring substantial benefits to individuals at age 50.

I regret that my present professional services do not afford me the chance to have case studies and statistical data applicable to your project. I can, however, advise you that hospitals are beginning to introduce the practice of doing a complete battery of tests on patients admitted to their inpatient accommodations. The belief is growing that the cost of doing this, instead of the individually selected tests related to a patient's clinical needs, is no higher and the higher productivity of meaningful results enables the physician to render a better qualitative service to his patient.

One of the hospitals which has instituted this practice, involving automated equipment, is the Mount Sinai Hospital, 100th Street and 5th Avenue, New York, N.Y. Your office may wish to get information about this program directly from Martin R. Steinberg, M.D., director.

I am also taking the liberty to suggest that your office contact George James, M.D., former commissioner of health and presently dean of the Mount Sinai School of Medicine and executive vice president of medical affairs. He has spoken and written extensively on health maintenance and has, during his tenure as commissioner of health, helped organize plans for a municipal hospital to include in-patient services, ambulatory services, health center programs, welfare center activities and community mental health programs. His health center concept deals with the problems of all age groups in much the manner you propose for the older groups.

I am heartily in favor of what you want to accomplish through your proposed pro-

gram. I am, however, disposed to believe that the health protection centers should not be free standing facilities but integrated with medical schools, community hospitals, etc. They would, in this way, be kept in the mainstream of hospital and medical activities.

The proposed health protection units might then be the satellite resources to promote their availability to many for whom accessibility to the larger centers would be difficult.

I hope you will find these comments and suggestions helpful.

Sincerely yours,

M. HINENBURG, M.D.,
Medical Care Consultant.

THE BROOKDALE HOSPITAL CENTER,
Brooklyn, N.Y., December 21, 1965.

Senator HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: In reply to your letter of December 10, the following information is offered.

The Brookdale Hospital Center, at all levels—board of trustees, medical board, and staff—has recognized the need for dramatic changes in the traditional role of the general hospital as a provider of health care. We have therefore gone on record as committed to involvement in programming for the health needs of the community. To further these aims, a department of community health has been created. This unit has full departmental status at the same level as the traditional departments, e.g.: medicine, surgery, etc.

With the financial support of the Gerontology Branch, U.S. Public Health Service, we have formulated firm plans for a hospital-based complex which provides sufficient portals of entry for the individual in the community to meet his changing health needs. The key characteristics of the program are: availability, accessibility, continuity, integration, and acceptability. The health services are to be available when the need arises; situated so that the person can get to them; provided a continuum of care, avoiding the episodic health care at crises; consider the individual in his medical, psychosocial and economic milieu; and are utilized by the people of the community.

The components of the hospital complex are: general hospital; ambulatory care services, including outpatient department and home care; geriatric health station; extended care facility; and day hospital. The latter two units will be housed in a community health center to be completed in 1969.

We have concluded negotiation of a contract with the New York City Department of Welfare to provide comprehensive medical care to all OAA patients in the hospital's core area, approximately 3,000 in number. This activity will be housed in a geriatric ambulatory care center building scheduled for completion in the summer of 1966. This building will be eminently suitable for accommodating the geriatric health station.

This geriatric health station, originally conceived as a traditional health assessment facility, has been reevaluated in the light of the Permanente project and the advances in technology in this field. During the past year we have been exploring the possibility of establishing a highly automated and computerized system. We have established the feasibility of automated ECG, spirometry, EEG, and blood chemistry, being fed into a computer such as the IBM 1130 or 3200 system, to produce a referral scale. If coding of a self-administered health questionnaire is added to the above (as in the Permanente project), an efficient economic health evaluation process is achieved.

Of primary importance is the conservation of time required from the health professionals. This permits maximal utilization of professional skills at the appropriate levels and expands the number of individuals who can be evaluated many fold.

This geriatric health station or health maintenance unit would be another portal of entry into the hospital-based complex for those individuals with no private physician.

The population of this hospital's core area is approximately 500,000 with 50,000 to 60,000 individuals 65 years of age or older. In many parts of this area there is an estimated 90 to 95 percent incidence of medical indigency. A large proportion of the population is Negro and Puerto Rican.

There are, as expected, unmet health needs, lack of health maintenance information, and poor or absent motivation. We are therefore anxious to provide a health maintenance program for the aged, not only as a preventive health measure, but as the first step in an educational process which will draw the individual into the mainstream of health care. Unfortunately, we have no funds for this part of the program.

It should be noted that a computer complex as described above could service satellite health stations where the various procedures could be performed and the information relayed to it for processing.

The provisions of your proposal will create services which the new Federal legislation fails to consider and which are essential for proper health care programming. The Brookdale Hospital Center and other community hospitals throughout the country who have accepted the challenge of change in their role as health care providers, will receive the support they so urgently need to meet this challenge.

Cordially,

LEO GITMAN, M.D.,
Chief, Gerontology Section.

HEALTH INSURANCE PLAN OF GREATER
NEW YORK,

New York, N.Y., December 22, 1965.

HON. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

MY DEAR SENATOR WILLIAMS: This is in response to your recent letter concerning your proposal for a health maintenance program for Americans.

One of the benefits covered by the premium in the Health Insurance Plan of Greater New York is a periodic general physical examination. We do not have precise figures on the proportion of our subscribers who avail themselves of this benefit, but the impression is that about 20 to 25 percent have such an examination each year. A research project conducted several years ago in one of the H.I.P. medical groups indicated that with special efforts this proportion could be increased appreciably.

More recently the research efforts related to the detection of unsuspected disease has been directed at specific conditions. One of the programs is attempting to integrate glaucoma screening into group medical practice with the aid of nonmedical personnel trained to perform glaucoma. The other is an intensive program to determine the value of periodic screening examinations of the breast for the lowering of mortality from breast cancer. Each breast examination includes palpation by a highly qualified clinician and mammography (soft tissue X-ray). Early results suggest that the screening program leads to the detection of a significant number of breast cancers that would have otherwise remained undiagnosed and that a large proportion of the cases are still localized when found. Additional observations are being made to see whether these results are stable and whether mortality is improved because of the earlier detection of breast cancer.

With regard to your proposal, it represents a means for overcoming many of the present deterrents to increasing the proportion of the adult population that periodically receives a comprehensive physical examination. These deterrents include high costs, inconvenience to the patients and a serious drain on physician time which is already in short supply. However, there are several questions associated with the establishment of regional health examination centers which deserve attention. For example, will it be possible to spread the network sufficiently to make the centers readily accessible to the population in rural and urban areas, in the North, South, and West? Also,

how will the program relate to the physician responsible for the followup care of the patient so as to avoid fragmentation and discontinuity of medical services? And, what is the most desirable age for initiating periodic health examinations?

I hope that the preceding proves useful to you in considering the scope of your legislation.

Sincerely yours,

SAM SHAPIRO,
Director, Division of Research and
Statistics.

STATE OF MARYLAND,
DEPARTMENT OF HEALTH,
Baltimore, Md., November 30, 1965.

HON. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: Needless to say I was delighted to receive your letter of November 23, 1965, expressing interest in wider application of known techniques for comprehensive screening for early evidence of certain chronic diseases. It so happens that this is one of my chief personal interests, and I am trying to step up action as rapidly as possible among our 24 local health departments in Maryland in establishing this capability. Indeed one of our best local health departments on the Eastern Shore near Delaware (Wicomico County-Salisbury) has just submitted such a special project proposal.

Last year one of the major innovations in public health services in Maryland was a program for statewide mass cytologic screening for cervical cancer in women. The enclosed June 1964 departmental bulletin describes this program in some detail. Both the Governor and the legislature decided to back us on this effort, the ambitious goal of which is nothing less than writing an epitaph for cervical cancer. Other reprints are included to give you further details of the effectiveness of this approach as described by one of the test's developers, Dr. Hugh J. Davis, of Johns Hopkins Medical School.

My reason for calling this particular screening program to your attention is that the specific target population is women 30 to 45 years of age. This well illustrates the important principle that different chronic diseases and disabilities have different target populations with respect to the age, sex, and other characteristics of the population. It would be a mistake, I believe, for such legislation to prescribe specific age limit. For example, the lower limit of age 50 which is cited in your letter would rule out the most important screening program we are now conducting, namely the cytologic screening for cervical cancer in women which is described above.

A number of chronic diseases and disabilities start very early in life so that effective preventive medical measures must be adapted accordingly. An excellent example of this is amblyopia exanopsia (blindness in one eye) which occurs when poor visual acuity in one eye or muscle imbalance in the preschool age child goes undetected. This is a condition in which vision fusion never takes place during the crucial developmental years. The image from one eye is blurred by some disorder such as poor visual acuity, astigmatism or muscle imbalance so that when the child tries to fuse this image with that of his good eye, he does not see well. He automatically and unconsciously suppresses the blurry image of his weak eye, and in so doing stops it from developing. The eventual result is blindness in one eye unless this condition is picked up by simple screening tests before 6 or 7 years of age. Blindness in this case is therefore preventable.

If the problem is not found, the child is in trouble. He will never have normal depth perception, for this requires two eyes. He may have difficulty in school. He will certainly be limited in the kinds of jobs he can do as an adult. He will be a much less safe driver, and more exposed to all sorts of accidents. And should his good eye be damaged by disease, or by one of the 300,000 eye accidents in this country each year, he may be left virtually blind.

Here then is an excellent example of a screening test to prevent a chronic permanent visual disorder which must be carried out at 3, 4, or 5 years of age.

As you well know the country was startled to learn from the medical examinations by Army Air Corps doctors in World War II, that 1 out of 25 men were blind in one eye and usually didn't know it. At this rate each year 100,000 American children are passing the point at which they can be rescued—all for want of a simple, inexpensive and brief vision screening test.

These two examples of screening tests are but a few of the many examples which I could give you to detect chronic and disabling diseases at a stage where their disabling effect can be prevented or greatly ameliorated. Diabetes can now be economically and readily detected by a screening blood sugar test. Glaucoma, a major cause of blindness, can be readily detected through tonometry, but few adults have ever received this simple test. Mammography is being utilized more and more to detect early breast cancer.

Gadgets are only a very small part of this process. What is needed are programs of organized community action by professionals and trained technicians—in other words public health programs. Screening techniques should be incorporated into medical practice, so that screening examinations are followed by a thorough history and physical examination by a physician, thus broadening his capacity to detect early disease.

Now that large expenditures are about to be made for chronic illness and disabilities in older citizens (for conditions which often could have been prevented or mitigated), your letter which strikes a note for an early detection is most timely. Detection of new cases of heart disease, cancer, hypertension and arteriosclerosis is an essential complementary component to the regional medical complex bill just passed by the Congress. Screening examinations have particular application to medically indigent populations in case finding.

In Maryland, I look forward to the development of broad and comprehensive screening facilities—health protection centers to use your phrase—as a well established year round service in all of our 24 local health departments. This Department will fully support your efforts to achieve this.

I would especially like to congratulate and commend you for this superb paragraph from your speech from CONGRESSIONAL RECORD of September 24, 1965:

"Only a major national commitment to apply the principles and techniques of preventive medicine on a mass basis will stem the rising tide of an increasing burden of medical care in terms of manpower, facilities, and dollars. We have the technology capacity to do this."

Nothing could more fittingly describe the basic philosophy of public health.

We appreciate your referring this question to us and hope that you will call us if you feel that we can be of further help.

Sincerely yours,

WILLIAM J. PEEPLES, M.D.,
Commissioner.

GOVERNMENT OF THE DISTRICT OF
COLUMBIA, DEPARTMENT OF PUBLIC HEALTH,
Washington, D.C., November 30, 1965.

HON. HARRISON A. WILLIAMS, JR.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: This will reply to your letter of November 23 in connection with the need for a health maintenance program.

As I understand your proposal, it calls for the development of a disease detection program provided free of charge for all persons over the age of 50, with referral of those found to have health defects to their private

physician or to public facilities in the case of those not able to afford private care.

The development of this kind of chronic disease detection program has been a goal of many of us in the public health field for some time. I believe that every individual over 40 (rather than 50) should have access to facilities which enable them to receive screening tests for a variety of diseases such as you have cited in your summary. In the case of some of these diseases, such as diabetes, testing at an earlier age even than 40 is desirable. The point, of course, is that the earlier one finds a disease entity in an individual, the more likely is that individual to be able to receive effective treatment. It is clear, for example, that an individual who develops glaucoma and has some degree of blindness as a result can receive treatment aimed at retarding further development of blindness; this treatment, however, cannot turn back the events that have occurred. In other words, the degree of blindness already contracted by the patient will remain. This same basic principle is true of other disease entities. While we must admit that our current knowledge of some of these diseases makes efficient treatment difficult, this should not preclude us from doing everything possible to detect the disease at an early date and doing everything within our power to provide medical and ancillary services aimed at preventing the disease from marching on its irrevocable course to disability and even early death. Further than this, early detection of disease may also serve to initiate steps aimed at rehabilitation. Again, the earlier this is undertaken, the better for the patient and for society.

While there is little question in my mind that the best place for these screening tests to be carried out is the office of the family physician, it seems unlikely that this procedure will take place, at least for a high percentage of our citizens. Therefore, the proposals you have outlined appear, in general, to make a great deal of sense. I would, of course, wish to reserve final judgment until I have an opportunity to review, in detail, the exact legislation you hope to introduce, and I would be most appreciative if I could receive said legislation and hopefully have an opportunity of reacting to it.

As an indication of my interest in this matter of disease detection, I am enclosing a recent article concerning a program that has been underway in the District of Columbia for the past 2½ years and that bears considerable similarity, I believe, to what you are proposing. You may be interested in the cost figures, the evaluation and the results of the operation thus far. It is, of course, currently an on-going operation. Further than this, I have within the past few months initiated an even larger disease detection program at our Southwest Health Center, which is now operating a full-time program of this nature for all persons in the District of Columbia over the age of 40. I recognize, of course, that many other communities in the country do not currently have this kind of program and, as I understand it, your proposed legislation is designed to meet this need.

I would point out what, I am sure, is quite obvious to you; namely, that the development of this program creates increasing demand for health manpower, not merely to staff the units but, more important, to arrive at a final diagnosis and provide appropriate treatment. It is this latter phase of the operation that can produce considerable problems. There is, of course, no use whatsoever in developing a disease detection program unless it is subsequently followed, and at an early date, by expeditious handling of the patient with a view to providing the necessary treatment and rehabilitation. The obvious question then arises as to whether there exists in many communi-

ties the health manpower readily available to meet this increased demand. This question is not easy to answer, but I am sure you will find that there are many in the health field who do not believe that an adequate supply of manpower currently exists for this purpose and that the number that do exist might preferably devote their time to handling the acute medical problems that need immediate treatment.

May I express my appreciation to you for allowing me to react to your proposals and to hope that I may have an opportunity of deliberating further in connection with this matter at some appropriate time during the course of the next session of Congress.

Very sincerely,

MURRAY GRANT, M.D., D.P.H.,
Director of Public Health.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS, DEPARTMENT OF HEALTH, PROVIDENCE, R.I.,

November 30, 1965.

HON. HARRISON A. WILLIAMS, JR.,
New Senate Office Building,
Washington, D.C.

DEAR SENATOR WILLIAMS: I was pleased to learn of your interest in the possibility of establishing semiautomated centers for the early detection of certain specific chronic diseases in apparently well older people. Legislation such as you would propose would have my unqualified approval.

As you well know, screening programs are a limited substitute for a complete physical examination given by a qualified, competent physician interested in preventive medicine. Under ideal circumstances, such examinations would be desirable for all adults over the age of 40 years. Realistically, however, one must realize that this is not an obtainable objective. Therefore, we must compromise by applying screening tests to large numbers of people.

The use of automated procedures in screening programs is a new and exciting prospect in public health today. We, in Rhode Island, have been sufficiently interested in the program at Kaiser-Permanente to send two members of our staff to Oakland to see it in operation.

No person who has studied the health needs of adults would seriously question the advantage of early recognition of chronic illness. Only by early detection and energetic management can we control conditions such as health disease, cancer, and stroke.

I hope you will introduce your proposal, and I hope the American Congress will have the wisdom to see its merits. I hope, also, that if this proposal becomes a reality, the State of Rhode Island will have the privilege of being selected to operate one of the proposed centers.

Sincerely yours,

JOSEPH B. CANNON, M.D., M.P.H.,
Director of Health.

CITY OF MILWAUKEE HEALTH DEPARTMENT,
Milwaukee, Wis., December 2, 1965.

HON. HARRISON A. WILLIAMS, JR.,
U.S. Senate,
Washington, D.C.

DEAR SIR: I have received two letters from you, both dated November 3, 1965, relating to a proposed Adult Health Protection Act of 1966. One letter was addressed to me as commissioner of health of the city of Milwaukee, the other was routed to me from Marquette University School of Medicine where I serve as professor and chairman of the department of public health.

I have reviewed the summary of your proposed Adult Health Protection Act of 1966 and, speaking generally, I am enthusiastic about the intent and scope of the proposed legislation.

The Milwaukee Health Department already possesses an appreciable quantity of automated equipment needed to carry out a broadly based multiphasic screening examination program in this community. Currently, the principal impediment to launching a full-scale program is the lack of financial support to employ the necessary personnel. I am engaged in pursuant of some limited financial assistance from the Public Health Service for this purpose.

I certainly feel a broadly based multiphasic screening test program should be available to any person age 50 or over who desires to participate. To limit the program to persons 65 years of age and over would seriously impair one of the primary purposes of the program; namely, the early diagnosis of disease. Early diagnosis is an essential step to the institution of early treatment.

The only significant criticism I have of the proposed Adult Health Protection Act of 1966, as summarized in the enclosure transmitted with your letter, relates to establishment of five health protection centers, to be followed at a later date by establishment of health protection units linked to centers by data transmission lines. I believe that one or two health protection centers, to carry out the functions delineated in the third paragraph of the second page of your summary, would be in order. The most meaningful benefits of the program will ensue through rapid development of many health protection units in many communities.

I feel that there is no need for the health protection units to be linked by data transmission lines to the centers, where interpretation of some tests, such as electrocardiographic tracings, could be performed by centralized electronic equipment. Small, highly sophisticated electronic interpreters will soon be available at a cost so low as to justify their placement in the individual health protection units. For example, an American corporation will go into production, on or about May 1, 1966, for manufacture of digital-analog computers which will automatically record and interpret electrocardiographic data. The cost of such a unit will be approximately \$4,200. When one considers the cost of an electrocardiograph, which the health protection unit would require, and linkage of units to centers by data transmission lines, I am sure it would be more economical to have the interpretations performed electronically right on the testing premises. In addition to saving in cost, there are other advantages, which I will not attempt to enumerate here.

Very truly yours,

E. R. KRUMBIEGEL, M.D.,
Commissioner of Health.

NEW JERSEY OPTOMETRIC ASSOCIATION,
Trenton, N.J., December 10, 1965.
Senator HARRISON A. WILLIAMS,
Senate Office Building,
Washington, D.C.

DEAR PETE: I am taking the liberty of sending you a copy of the resolution which was passed by the New Jersey Optometric Association at their annual meeting, Sunday, December 5, 1965.

Secondly, I am enclosing a news release that was sent from our public information office regarding our resolution. This was sent to all the dailies and weeklies in the State.

Pete, I think it is of great significance and I hope of interest to you that the preventive resolution was passed unanimously by those in attendance at our annual meeting.

The New Jersey Optometric Association is completely in agreement with your concept of the need for a health maintenance program for adult Americans. You can rest assured that when your bill is filed, this organization will be 100 percent behind it.

Hoping this letter finds you in the best of health, I remain, with kindest personal regards,

Very truly yours,

HERBERT L. MOSS, O.D.

BAYLOR UNIVERSITY,
COLLEGE OF MEDICINE,
Houston, Tex., December 4, 1965.

Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

MY DEAR SENATOR WILLIAMS: Thank you for your letter of November 23, 1965, along with a summary of legislation now being drafted to establish health protection centers.

The concept underlying your proposal has obvious merit. Indeed, consideration was given to this subject by the President's Commission on Heart Disease, Cancer, and Stroke, and I would hope that further consideration would be given in the implementation of the centers program as authorized by recent legislation.

Accordingly, I would support an intensive study of this proposal toward development of this concept as a practical means of advancing our health programs.

With kind regards,

Sincerely yours,

MICHAEL E. DEBAKEY, M.D.

THE UNIVERSITY OF TEXAS,
MEDICAL BRANCH,
Galveston, Tex., December 14, 1965.

Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: I have read with a great deal of interest your letter of November 23, and the copy of your address of September 24, 1965, relating to the need for a health maintenance program for Americans.

The purpose of this letter is to express to you what I feel to be the very great importance of programs designed primarily for the earliest possible detection of any disease process. Since the head of our research computer center here at the medical branch is also a member of our departmental staff, you can understand that we feel that a program such as you visualize will definitely entail the development of automated or semiautomated centers.

Whereas I can understand why you would wish to give priority to those individuals 50 years of age and over, I should also like to emphasize the importance of providing such services to all age groups. Just as a single example, if cancer of the uterine cervix is to be reduced as a major public health problem, early diagnosis must be aimed at those women in their early twenties. There are many other examples, most of which I am sure you are well aware. I merely want to point out that in my opinion, there should be no age restriction relative to the eligibility of medical care of this sort.

You are to be congratulated for your active interest in and support of this particular type of health maintenance program. I hope you will be able to keep us informed of further developments on the proposed legislation.

Sincerely yours,

DON W. MICKS,
Professor and Acting Chairman, Department of Preventive Medicine and Public Health.

YALE UNIVERSITY
SCHOOL OF MEDICINE,
New Haven, Conn., December 7, 1965.
Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

MY DEAR SENATOR WILLIAMS: Thank you for your letter of November 3 and for the copy of your important speech to the Senate.

To a very substantial degree your remarks reflect our views. We would be inclined, however, to go a little farther than you. For instance, although we agree that Medicare is a vital step and that the heart, stroke, and cancer program is of great importance, both of these are essentially therapeutic programs and are not oriented to the prevention of the chronic diseases of aging which are so

important today. We believe that the preventive approach to these diseases is the only one which will produce long-lasting results. When once these diseases have started, therapy can at best ameliorate but can rarely cure. Very early detection is vitally important.

Our other point of disagreement reflects what you yourself have said in the second paragraph of your letter—that further study has led you to believe that age 60 or even 50 might be a realistic age limit in a program designed to detect indications of disease. For many diseases, 50 is far too late. I would place the optimum age for the initiation of this program at about 35. If, for instance, abnormal levels of lipids are detected at this age it is probable that the eventual development of coronary heart disease can be made much less likely by initiating the appropriate diet. If on the other hand the abnormality is not detected until the age of 50 or 60, it is too late. I would point out that one of the most serious trends in this country today is the increasing frequency of cardiovascular disease in the forties and early fifties. The initiation of this program at the earlier age is perhaps even more important in the prevention of cancer, especially of the uterine cervix. These techniques are highly effective and can, for all intents and purposes, eliminate death from this condition. However, the cellular changes which preface the development of overt cancer can commonly be detected in the 30-year age group.

In spite of these criticisms, which are after all matters of detail, I would like to offer my sincere congratulations on your immensely important proposals and I would much appreciate further information on the proposed legislation as it is developed.

Sincerely yours,

ANTHONY M. M. PAYNE, M.D., F.R.C.P.,
Chairman.

THE UNIVERSITY OF NORTH CAROLINA
SCHOOL OF PUBLIC HEALTH,
Chapel Hill, N.C., December 6, 1965.
Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

SIR: Your recent letter to Dr. W. Fred Mayes, dean of the University of North Carolina School of Public Health, has been called to my attention with the suggestion that it would be appropriate to communicate to you any views regarding the proposed legislation dealing with adult health protection.

I am most impressed with the insight into the natural history of most chronic diseases which is suggested by your proposal, inasmuch as the only possibility for significantly altering the impact of the chronic diseases on our population lies in early detection, diagnosis, and treatment as indicated.

You are aware, I am sure, that much of the health progress of this century has been achieved through the application of public health procedures which either prevent disease from developing, or prevent its development to a more advanced stage when treatment is noneffective or less effective.

There are none who would wish any less emphasis on treatment, but I would hope that our enthusiasm for heart, cancer, and stroke centers and related programs could be extended to include appropriate attention to the application of existing screening procedures on a broad basis. One would further hope that research for the development of new screening techniques and for the most effective methods of organizing such programs will not be neglected.

Much of my conviction regarding these points stems from my interest in the field of chronic disease control. This has led to an opportunity to survey various patient populations receiving care for long-term disorders. The study of nursing home patients in North Carolina (see enclosed reprint) revealed that the application of appropriate preventive techniques at earlier periods might have materially delayed the onset of

some of the complications demonstrated by these patients.

That we continue to record deaths from cancer of the cervix in females, that blindness due to glaucoma continues to be diagnosed, that we constantly need to remind ourselves concerning the unknown diabetics in the population—all of these serve as justifications for the program which you have envisioned.

I will be interested in hearing how the proposed legislation is received in Congress. Thank you for the opportunity to express my feeling.

Yours very truly,

CHARLES M. CAMERON, Jr., M.D., M.P.H.
Professor, Public Health Administration.

THE JOHNS HOPKINS UNIVERSITY
SCHOOL OF HYGIENE AND PUBLIC-
HEALTH,
Baltimore, Md., December 14, 1965.

HON. HARRISON A. WILLIAMS, Jr.,
Senate Office Building,
Washington, D.C.

DEAR SENATOR WILLIAMS: I wish to add my strong support for your proposal Adult Health Protection Act of 1966. The proposed health protection centers would represent a most important contribution of the enormous problems we face in delivering medical care to individuals and communities efficiently and effectively.

The emphasis in this country on the categorical, disease oriented, approach both to medical research and to medical treatment, and the emphasis on professional specialization have been associated with enormous advances in our fundamental understanding of disease processes. In the long haul advances in the health of the people, both through prevention and through medical cure, will come from such work. In the short haul, however, this approach militates against the provision of optimum medical care and the prompt delivery of what knowledge we now have. In the short haul it is medical care which interests society and it is early diagnosis which provides the greatest opportunity for favorably influencing the health of those now alive.

I have visited Dr. Morris Collen's "multi-phasic health checkup program" in Oakland and believe in many respects it represents an important component in the medicine of the future. His critical approach to the study of the sensitivity, specificity, yield and costs of the various tests employed are most important aspects of the work at Kaiser-Permanente.

I support your approach to the initial establishment of five centers in appropriate universities. There is still much work to be done on the development of health protection centers before they could be efficiently utilized on a large scale by smaller institutions. Nevertheless their full impact can only be realized when such facilities are made available in local community institutions. For this reason the phasing of your proposed program seems appropriate.

I hope you will keep me informed about the development of the proposed legislation. If there is anything I can do to add my support, please let me know.

Yours sincerely,

KERR L. WHITE, M.D.,
Professor and Director.

STATE OF WEST VIRGINIA,
DEPARTMENT OF HEALTH,

Charleston, W. Va., December 16, 1965.
HON. HARRISON A. WILLIAMS, Jr.,
Senate Office Building,
Washington, D.C.

DEAR SENATOR WILLIAMS: I appreciate receiving your letter of November 23, enclosing a copy of your speech in the Senate regarding a health maintenance program for adult Americans.

I thoroughly agree with the concept of objectives. I have worked in the field of preventive medicine and public health for the last 19 years, during which time I have observed, personally, the effects you have brought out in your speech.

I would appreciate a copy of your proposed bill when it is drafted. Please contact me if I can assist you in any way.

Sincerely,

N. H. DYER, M.D., M.P.H.,
State Director of Health.

DEPARTMENT OF HEALTH,
Paterson, N.J., December 9, 1965.

HON. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: Thank you for your letter of November 23, and the accompanying material on the proposed Adult Health Protection Act of 1966. The establishment of such health protection centers, as are envisioned in this program, would be a major step in the direction of making health services and the best knowledge of American medicine available to the general public.

The serious gap between medical advances and available health services is one which this great Nation can no longer afford. Although perhaps less dramatic than the saving of lives by treating the sick and infirm, it would certainly make important strides in orienting the attitude of the American public and the medical profession to the value of periodic preventive services and the vast economy effected in this manner. The individual and cumulative health of the Nation would be immeasurably improved.

May I commend you for your foresight in the public health interest. With all good wishes, I am,

Sincerely yours,

J. ALLEN YAGER, M.D., M.P.H.,
Director, Department of Health.

COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF HEALTH,
Harrisburg, Pa., December 6, 1965.

HON. HARRISON A. WILLIAMS, Jr.,
U.S. Senate, Washington, D.C.

DEAR SENATOR WILLIAMS: Your proposal to foster the establishment of health protection centers throughout the United States is as timely as it is important.

In 1949, Dr. Leonard Scheele first established a Division of Chronic Disease in the Public Health Service and appointed me Chief. An intensive study of this complicated problem convinced me that one thing that was badly needed was a combined screening operation that would pull together those screening tests that were specific, quick to perform, and economical. The first paper published on multiple screening, I believe, was the one I prepared for Public Health Reports in 1949.

A demonstration project was developed in a housing development (Planner House) in Indianapolis. I predicted that more than 1,000 pathological conditions would be found in the first 1,000 apparently well adults screened. About 1,200 conditions were actually found. Of these, one-third were serious conditions—nephritis, heart disease, hypertension, diabetes, tuberculosis, syphilis, arthritis, glaucoma, etc. About two-thirds were vision and hearing defects, overweight and other less serious (but correctable) conditions.

Shortly after that an interesting comparative study was promoted and financed by the division at the Boston dispensary. A group of 1,000 apparently well adults were subjected to three different types of examinations conducted by three different teams.

The first examination consisted of a routine physical examination then in vogue—auscultation, percussion, inspection (cost about \$10).

The second examination was an abbreviated physical examination—shorter in time and less detailed (cost about \$5).

The third examination was a screening examination conducted largely by technicians—multiple screening (cost about \$1).

An evaluation of the effectiveness of these three types of examination showed that more pathological conditions were found by multiple screening examinations than by either of the orthodox physical examinations.

Our experiments in multiple screening were then extended to cover population groups in large cities. One of these was Richmond, Va. Here a multiple screening unit was established in a large department store and mobile units were set up on street corners and in factories.

The American Medical Association established the Health Information Foundation which financed a study of the Richmond, Va., multiple screening project—convinced doctors and lay people would be opposed to it.

Actually, a large number of physicians—over half if I remember correctly—felt it was a good thing. Most of the people screened favored it. Many said they would be happy to pay \$10 to \$20 a year more taxes if they could be screened each year. The exact statistics were contained in a one volume report published in the early 1950's by the Health Information Foundation.

As an experiment, Dr. McGough, health officer of Alexandria, Va., persuaded the city medical society to approve a multiple screening week in November 1951. Later he tried to abandon it because of the time drain on the staff. However, the public and the medical society insisted that it be continued. It was still a feature of the Alexandria city health program as recently as 2 years ago.

Traditionally, in the training of physicians little emphasis has been placed on prevention. Until recently few medical schools paid more than lip service to it. Embryo physicians were largely taught by surgeons, internists, neurologists, and other clinical specialists. They saw an acutely ill patient operated on and recover. This was dramatic. The clinician became the hero—his footsteps to be followed.

Hence, it is understandable that busy clinicians in your town and mine, too busy often to attend medical society meetings, seldom develop an appreciation of the value of prevention. They never really see the social and economic value of preventing premature or unnecessary disabling complications of disease. They are firemen skilled in their trade of putting out fires but giving little thought to the far greater economy of preventing them.

Therefore, the development of the health protection centers that you propose in local hospitals will do more to teach physicians the value of prevention than anything else that could be done.

In addition, the additive experience of person after person finding out that they had sugar diabetes or high blood pressure before they ever knew it would be highly motivational to others in the community. Personal experience, personal testimony is the most potent type of motivational education.

And the administration of these health protection clinics, hopefully, would involve the local health department, the local hospital, and local physicians in a tangible co-operative venture that could draw preventive and curative medicine much closer together, something that can't be done by speeches.

For generations emphasis was placed on clinical medicine. Following World War II several fortuitous scientific and political factors converged to bring about an amazing expansion in basic research. Through both these eras prevention, application, and pub-

lic health stood by watching, support lacking.

In typically American fashion the pendulum had to swing far to one side before swinging back. Now the shelves are brimming with unused medical discoveries and techniques. And enlightened congressional leaders like yourself are evidencing more awareness of this fact than the medical profession itself.

Perhaps then, with this type of support, health protection centers can be developed, effective local health departments can be financed, and the dividends from the billions of dollars expended on basic research can finally be used for the full benefit of people.

Sincerely yours,

A. L. CHAPMAN, M.D.,
Assistant Surgeon General (Retired),
U.S. Public Health Service.

STATE OF NEW JERSEY,
DEPARTMENT OF HEALTH,
Trenton, N.J., December 6, 1965.

HON. HARRISON A. WILLIAMS, Jr.,
Senate Office Building,
Washington, D.C.

DEAR SENATOR WILLIAMS: Your proposal to establish health protection centers is bold and stimulating. Your presentation to the Senate was masterful.

The logic of periodic examinations is clear. It is strange that the mechanism is used so little.

I have been interested in "multiphasic screening" for a long while, but have had very limited success. My enthusiasm has waned, but could readily be revived.

The Kaiser Foundation pilot program should provide new understanding with respect to yields, acceptance and use by people and costs per remediable defect found. I have not seen papers coming out of the Kaiser project. I notice that in Dr. Collen's letter, which you quoted, he said that conclusive statistical data were not then available.

We do fairly well in diabetes detection in New Jersey, but are having a hard time on cervical cancer testing. The latter is expensive as it is now done. Additional Federal dollars are about to be put into cervical cytology and several New Jersey hospitals are applying for grants.

There certainly should be more large, carefully operated and evaluated programs such as you proposed.

Sincerely,

ROSCOE P. KANDLE, M.D.,
State Commissioner of Health.

HEALTH INSURANCE PLAN OF
GREATER NEW YORK,
New York, N.Y., December 9, 1965.

Senator HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: We are interested in your proposed legislation to establish health protection centers.

As a nonprofit organization with 31 medical groups providing comprehensive medical care to more than 700,000 men, women, and children in the greater New York area, we are continually seeking better and more efficient ways of providing medical care. We are eagerly awaiting the findings of the large-scale mass screening experiment by the Permanente medical groups in Oakland and San Francisco.

We are currently establishing a centralized clinical laboratory where chemical, bacteriological, cytological, and tissue specimens may be brought from all of our 31 medical groups and where automated equipment will be used and highly skilled personnel will be employed. Such a laboratory, working in connection with health protection centers such as you propose, would be ideal.

We are also under contract with the National Cancer Institute studying mammography as a possible method of early detection of breast cancer and through which it is hoped that the mortality rate from this disease will be decreased. Thirty thousand of our subscribers are in the study group and 30,000 are in a control group.

For several years we have worked on various methods of early detection of glaucoma and have trained nurses and technicians in the performance of this delicate test.

We all have much more to learn about early detection of diseases and how to apply the many new advances being made in this field.

HIP has long supported progressive health legislation and your letter leads me to believe that your proposal is one we would wish to support. We would like to work with the Public Health Service and the Department of Health of New York City in establishing a model health protection center in New York City.

Sincerely yours,

JAMES BRINDLE,
President.

STATE OF CALIFORNIA, DEPARTMENT
OF PUBLIC HEALTH,
Berkeley, Calif., January 13, 1966.

HON. HARRISON A. WILLIAMS, Jr.,
United States Senate,
Washington, D.C.

MY DEAR SENATOR WILLIAMS: Thank you for your letter of November 23, 1965, concerning a proposed health maintenance program for adults. We would appreciate any information you can supply about the bill presently being drafted to establish centers for disease detection.

Multiphasic screening for early detection of disease has received a considerable amount of attention in California for many years. Our first report of such a program was published in 1949.¹ The accumulated literature has now become very extensive.

The Commission on Chronic Illness in 1957 described screening as "the application of screening tests rapidly and economically to large population groups, to identify persons who probably have abnormalities so that they can be referred for diagnosis and, if indicated, for medical care."² Screening is not a substitute for comprehensive medical examinations. Rather, its immediate objective is to identify persons who, though unaware of a health problem, are likely to be benefited by prompt medical evaluation and care. There is a real need for careful evaluation of the possible contribution of multiphasic screening to health. Several years ago we encouraged Dr. Morris F. Collen, director, medical methods research, the Permanente Medical Group, Oakland, Calif., to undertake such a study.

With financial support from Public Health Service grants, Dr. Collen and his staff started this important research in 1962. The principal objective is "to evaluate multiphasic screening as to its effectiveness in the prevention of illness, and in the reduction of morbidity and mortality." Several members of the California State Department of Public Health serve this endeavor in an advisory capacity and regard it as one of the most important current studies in the entire field of chronic diseases.

¹ Canelo, C. K., Bissell, D. M., Abrams, H. and Breslow, L.: A multiphasic screening survey in San Jose, Calif. Med. 71:409-413 (Dec.) 1949.

² Commission on Chronic Illness; Chronic Illness in the United States, Vol. I, Prevention of Chronic Illness. Cambridge, Mass., Harvard University Press for the Commonwealth Fund, 1957. p. 47.

The present results of Dr. Collen's research leads us to believe that 5 to 10 more projects of the same magnitude should be undertaken promptly. Your proposed bill would permit this development. Then we would be better equipped to judge whether multiphasic screening programs merit vastly increased support. Convincing evidence of the value of several screening tests already exists and these should be widely utilized in screening programs; for others the evidence is either tenuous or nonexistent and they should be further studied.

Our experience in promotion and development of screening programs indicates the importance of adapting each endeavor to the special interests, needs and capabilities of the community being served. Efforts to introduce comprehensive sophisticated programs will succeed in some areas but not in others. In the latter case it is far better to begin on a modest scale that is acceptable and feasible. Both situations require extensive planning and preparation. Participation of local physicians, paramedical personnel and related official and voluntary health agencies is essential.

You raised the question of a minimum age of eligibility for multiphasic screening. We feel that there should be no arbitrary age limitation. Though in general the yield of newly detected disease is higher among older persons, it is not always so. For example, amblyopia ex anopsia ("lazy eye") is a disease of early childhood. The best opportunity for correction of this significant cause of blindness arises when it is detected and treated before the patient is 5 years old. The most efficient screening programs direct their attention primarily to segments of the population with high prevalence of the condition to be detected. Age is an important but by no means the only factor used to identify such populations.

We hope these comments will be helpful. Please do not hesitate to call on us if we can be of further assistance.

Very sincerely yours,

LESTER BRESLOW, M.D.,
Director of Public Health.